

## VSR - VOLTAGE SENSITIVE RELAY

[ Part number: PPT – 4015 ]

- Dual battery charging made easy
- Protects electronics on house battery circuit from engine start up spikes
- Fully automatic

### SPECIFICATIONS:

Continuous: 120Amps

Intermittent: 140 Amps

Sense: dual

Voltage system: 12VDC

Cut in/Cut out: 13.7/12.8VDC

### VSR Operation:

The Voltage Sensitive Relay (VSR) allows two batteries to be charged at the same time. When the engine is started and the start battery reaches 13.7 volts, the VSR engages, allowing two battery banks (start and house) to be charged simultaneously. When the voltage drops below 12.8 volts (eg. the engine is stopped), the VSR disengages, separating the batteries. This system eliminates the possibility of draining the wrong battery and protects sensitive electronic equipment powered from the house battery from harmful engine start up spikes.

### How the VSR works:

Once the starting battery's voltage rise to above 13.7 VDC, the VSR switches to charge both batteries in parallel, when the voltage drops below 12.8 VDC the VSR disengages. A buzzer-like sound can be heard as the relay quickly switches in and out. Disengagement can occur at idle (low amps out due to slow speed of alternator) or if the house battery is at a low charge. An increase of the engine's RPM will increase the alternator output and hold up the voltage.

